

# Claims

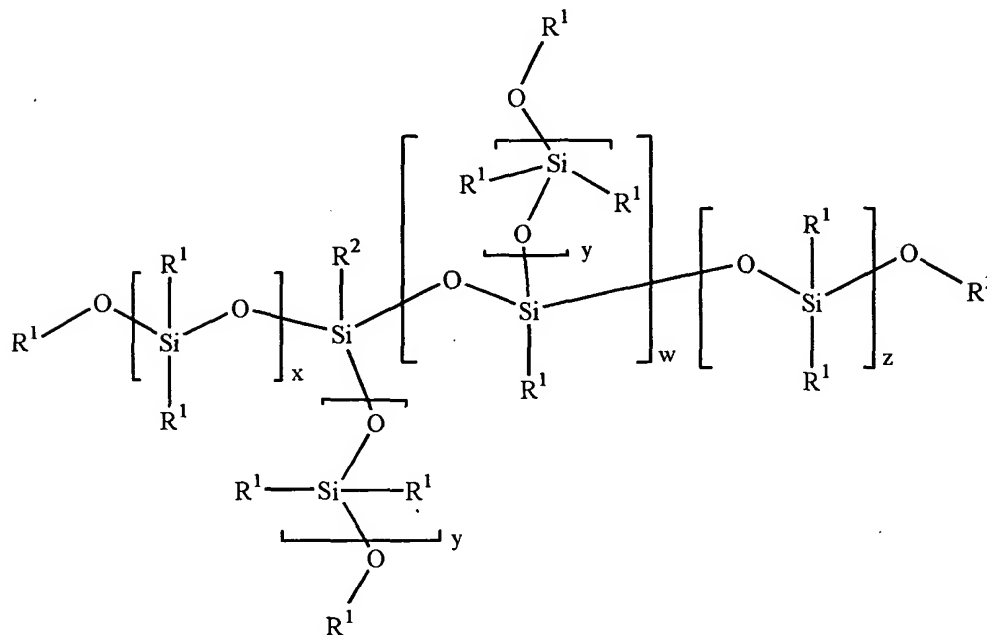
- [c1] 1.A composition comprising:  
a poly(arylene ether) resin;  
a polyamide resin having a weight average molecular weight greater than or equal to about 75,000 as determined by gel permeation chromatography using polystyrene standards;  
an impact modifier; and  
a fire retardant.
- [c2] 2.The composition of Claim 1, further comprising a compatibilizer.
- [c3] 3.The composition of Claim 1, wherein the composition has a notched Izod impact of greater than or equal to about 45 Joules per meter.
- [c4] 4.The composition of Claim 1, wherein the composition has a reverse notched Izod impact of greater than or equal to about 500 Joules per meter.
- [c5] 5.The composition of Claim 1, wherein the composition has a flame retardance of V-1 or better at a thickness of about 3.2 millimeters.
- [c6] 6. The composition of Claim 1, wherein the impact modifier is a block copolymer.
- [c7] 7. The composition of Claim 6, wherein the block copolymer is

a triblock copolymer.

- [c8] 8.The composition of Claim 1, wherein the polyamide has a weight average molecular weight greater than or equal to about 79,000 as determined by gel permeation chromatography using polystyrene standards.
- [c9] 9.The composition of Claim 8, wherein the polyamide has a weight average molecular weight greater than or equal to about 82,000 as determined by gel permeation chromatography using polystyrene standards.
- [c10] 10.The composition of Claim 1, wherein the polyamide is an aliphatic polyamide.
- [c11] 11.The composition of Claim 1, wherein the poly(arylene ether) has an intrinsic viscosity of about 0.10 to about 0.60 deciliters per gram as measured in chloroform at 25 Â°C.
- [c12] 12.The composition of Claim 1, wherein the composition comprises about 18 to about 65 weight percent poly(arylene ether), based on the total weight of the composition.
- [c13] 13.The composition of Claim 1, wherein the composition comprises about 35 to about 70 weight percent polyamide, based on the total weight of the composition.
- [c14] 14.The composition of Claim 1, wherein the composition comprises about 1 to about 15 weight percent impact modifier,

based on the total weight of the composition.

- [c15] 15. The composition of Claim 1, wherein the flame retardant comprises a polysiloxane of the formula

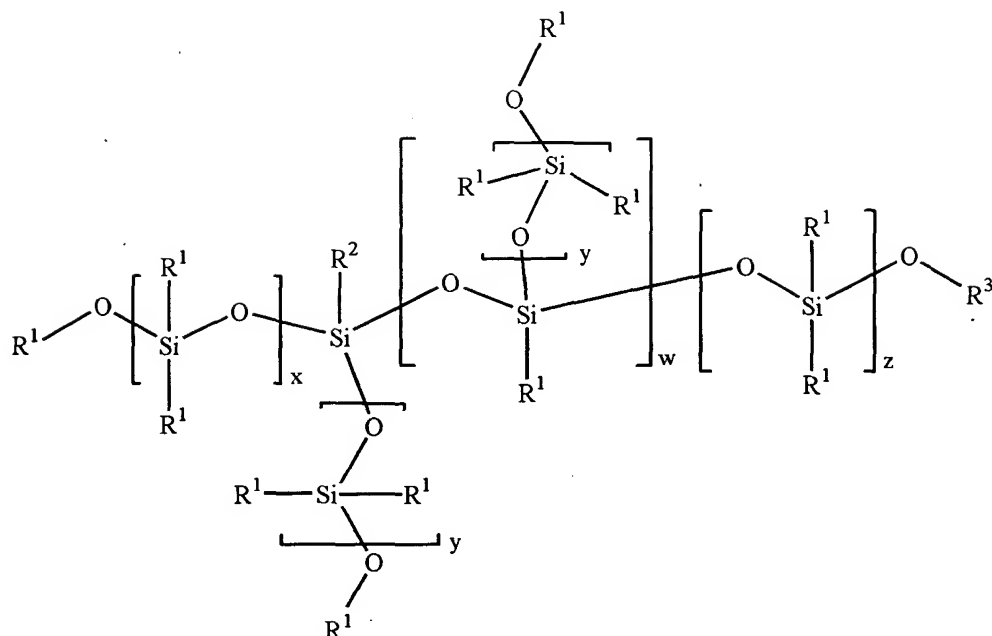


wherein each  $R^1$  is independently a  $C_{1-5}$  alkyl group,  $R^2$  is a  $C_{1-5}$  alkyl group or a primary or secondary amino group, provided that  $R^2$  is a  $C_{1-5}$  alkyl group when  $w$  is 1 and a N-(2-aminoalkyl)-3-aminoalkyl group when  $w$  is 0,  $R^3$  is hydrogen or a  $C_{1-5}$  alkyl group,  $w$  is 0 or 1 and  $x$  and  $y$  are each independently an integer from 1 to 7 and  $z$  is an integer from 0 to 7 and at least one boron compound.

- [c16] 16. The composition of Claim 15, wherein the boron compound is selected from the group consisting of metal borates, boric acid, organic boron compounds, perborates, boron phosphate and mixtures of two or more of the foregoing.

- [c17] 17.The composition of Claim 15, further comprising an inorganic phosphate and/or titanium oxide.
- [c18] 18.The composition of Claim 15, wherein the composition comprises about 1 to about 30 weight percent boron compound and about 1 to about 20 weight percent polysiloxane, based on the total weight of the composition.
- [c19] 19.A composition comprising the reaction product of  
a poly(arylene ether) resin;  
a polyamide resin having a weight average molecular weight greater than or equal to about 75,000 as determined by gel permeation chromatography using polystyrene standards;  
an impact modifier;  
a compatibilizer; and  
a fire retardant.
- [c20] 20.The composition of Claim 19, wherein the composition has a notched Izod impact of greater than or equal to about 45 Joules per meter.
- [c21] 21.The composition of Claim 19, wherein the composition has a reverse notched Izod impact of greater than or equal to about 500 Joules per meter.
- [c22] 22.The composition of Claim 19, wherein the composition has a flame retardance of V-1 or better at a thickness of about 3.2 millimeters.

- [c23] 23. The composition of Claim 19, wherein the impact modifier is a block copolymer.
- [c24] 24. The composition of Claim 19, wherein the polyamide has a weight average molecular weight greater than or equal to about 79,000 as determined by gel permeation chromatography using polystyrene standards.
- [c25] 25. The composition of Claim 24, wherein the polyamide has a weight average molecular weight greater than or equal to about 82,000 as determined by gel permeation chromatography using polystyrene standards.
- [c26] 26. The composition of Claim 19, wherein the composition comprises about 18 to about 65 weight percent poly(arylene ether), about 35 to about 70 weight percent polyamide, and about 1 to about 15 weight percent impact modifier, based on the total weight of the composition.
- [c27] 27. The composition of Claim 19, wherein the flame retardant comprises a polysiloxane of the formula



wherein each  $R^1$  is independently a  $C_{1-5}$  alkyl group,  $R^2$  is a  $C_{1-5}$  alkyl group or a primary or secondary amino group, provided that  $R^2$  is a  $C_{1-5}$  alkyl group when  $w$  is 1 and a N-(2-aminoalkyl)-3-aminoalkyl group when  $w$  is 0,  $R^3$  is hydrogen or a  $C_{1-5}$  alkyl group,  $w$  is 0 or 1 and  $x$  and  $y$  are each independently an integer from 1 to 7 and  $z$  is an integer from 0 to 7 and at least one boron compound.

[c28] 28.The composition of Claim 27, wherein the boron compound is selected from the group consisting of metal borates, boric acid, organic boron compounds, perborates, boron phosphate and mixtures of two or more of the foregoing.

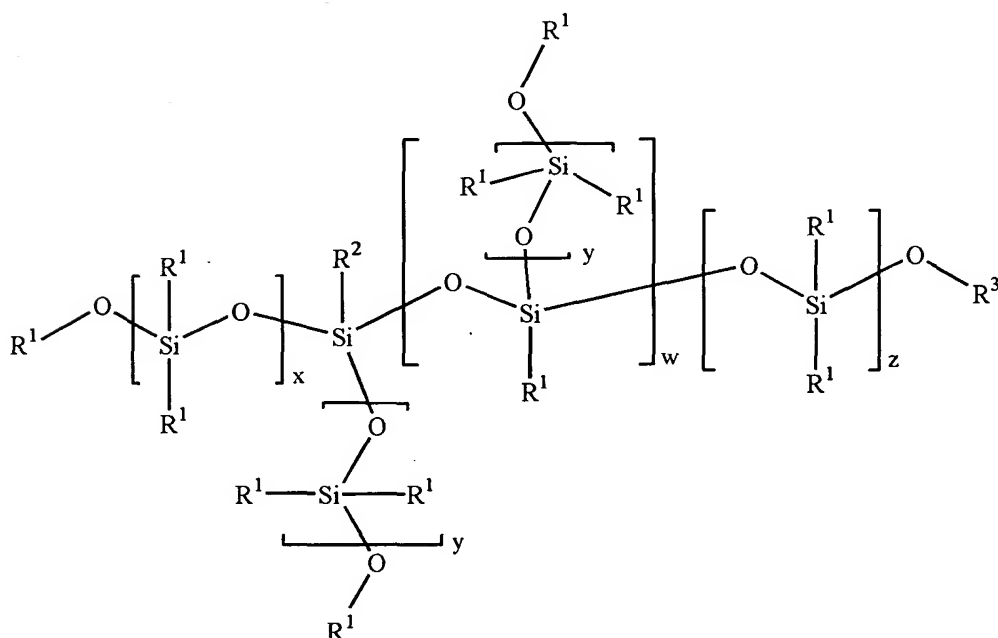
[c29] 29.The composition of Claim 27, further comprising titanium oxide.

[c30] 30.The composition of Claim 27, wherein the composition

comprises about 1 to about 30 weight percent boron compound and about 1 to about 20 weight percent polysiloxane, based on the total weight of the composition.

[c31] 31. The composition of Claim 19, wherein the compatibilizer is citric acid.

[c32] 32. A composition consisting essentially of:  
 a poly(arylene ether) resin;  
 a polyamide resin having a weight average molecular weight greater than or equal to about 75,000 as determined by gel permeation chromatography using polystyrene standards;  
 an impact modifier;  
 a polysiloxane of the formula



wherein each  $\text{R}^1$  is independently a  $\text{C}_{1-5}$  alkyl group,  $\text{R}^2$  is a  $\text{C}_{1-5}$  alkyl group or a primary or secondary amino group, provided that  $\text{R}^2$  is a  $\text{C}_{1-5}$  alkyl group when  $w$  is 1 and a N-(2-

aminoalkyl)-3-aminoalkyl group when  $w$  is 0,  $R^3$  is hydrogen or a  $C_{1-5}$  alkyl group,  $w$  is 0 or 1 and  $x$  and  $y$  are each independently an integer from 1 to 7 and  $z$  is an integer from 0 to 7; and  
at least one boron compound.